



Glosten

PROJECT MEMORANDUM

Matanuska Cabin Deck Arrangement Alternatives

1 November 2022

TO: Cisco Flores, Wayne Phillips (AMHS)
FROM: Jim Wolfe, PE
JOB/FILE NO. 21001.01

References

1. Johnsen, P. "FW: Matanuska", email, 31 October 2022.

Introduction

This memo contains comments to the pros and cons described in the email from Paul Johnsen, Reference 1. Additional comments are added

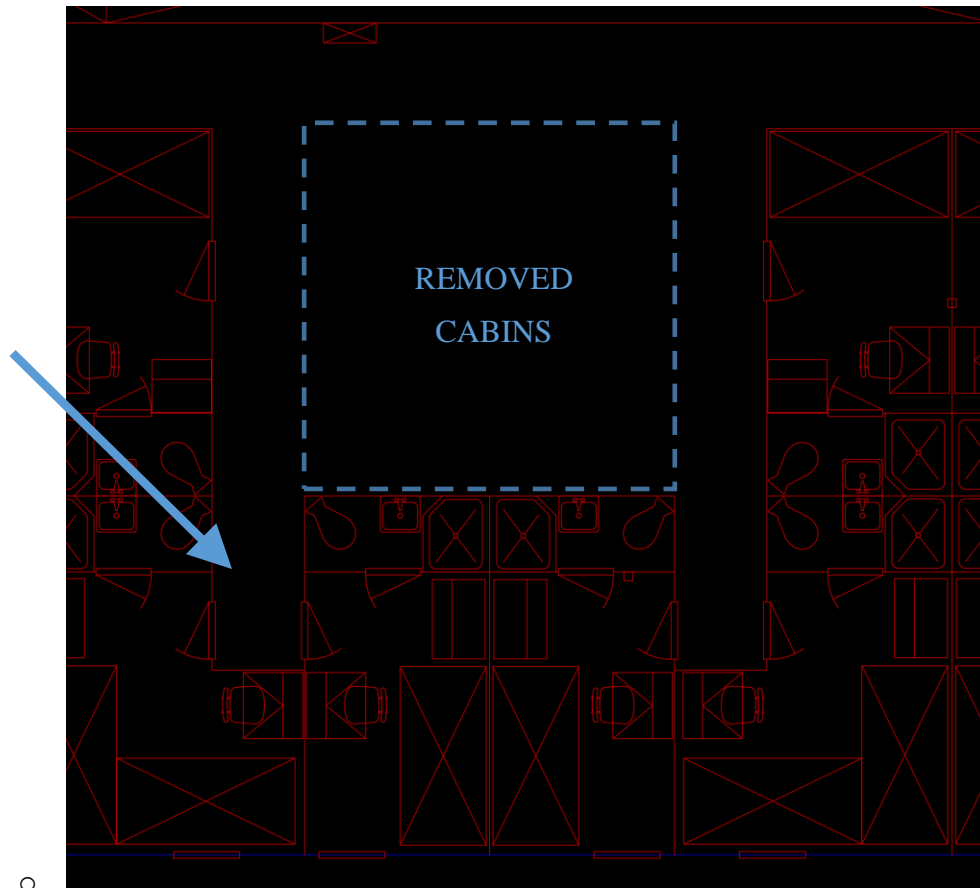
PROS

- *Major cost reduction*
 - I agree that retaining many of the cabins will reduce the overall project cost.
 - Retaining most of the cabins also means that other items in the scope of the current DEC project are no longer as reasonable. Examples include: Public address replacement, ventilation and heating upgrades. Removing these renewals from the scope would reduce project costs, but retain aged equipment on the vessel.
- *Major out of service time reduction*
 - Agree that lower scope could reduce time in the shipyard.
- *Improved crew retention by not having the ship out of service for 10 months*
 - Crew retention/assignments is AMHS operational decision. Glosten has no comment.
- *Without buying all new equipment, there is less chance of supply chain issues that could cause delays over the 10-month estimate.*
 - Less equipment to purchase will reduce risk exposure to supply chain problems. Supply chain risk can also be mitigated by allowing ample time for shipyard to procure equipment prior to the vessel arrival at the shipyard.
- *Perhaps funds saved could be used for improvements that would increase reliability.*
 - Funding priorities are AMHS decision. Glosten has no comment.

CONS

- *Removal of 24 out of 113 cabins (21% reduction in the number of cabins)*
 - Agree. I don't know how often all cabins are sold out, so cannot comment on the impact of reduced number of cabins.
- *Lost cabin revenue*

- Agree.
- *Project specifications would need to be modified at an additional cost*
 - Concur that development of alternate scope of work and plans will incur engineering costs.
- Added: end product of removing cabins and retaining others will be inferior to replacing all cabins with new equipment.
- Added: Retaining aged equipment (ventilation, heating, plumbing, electrical, etc) will keep higher risk associated with older equipment.
- Added: Without removing all joiner, the entirety of the cabin deck cannot be inspected. Leaving potential unknown structural deficiencies.
- Added: Removing some cabins will likely expose discovery work that will require removal of some of the exterior cabins. This expected discovery work should be accounted for in project planning similar to the existing project scope.
- Added: engineering and contracting schedule.
 - Engineering and contracting schedule has not been mentioned, but could be an impactful consideration. The current specifications and modification drawings have been approved by ABS and USCG. Development of a new set of plans and specifications will take time. This development time and time for regulatory review and approval of plans should be considered.
- Added: Wide passageways are difficult to transit in rough seaways. Matanuska largely operates in protected waters, but intermediate handrails or grabs may need to be considered in the larger passageways.
- Added: removing the cabins as sketched in the email attachment (Reference 1) will not remove the dead end corridors without additional modifications to the retained cabins. SOLAS definition of “dead-end corridor” is a recess that has a depth dimension that is longer than its width. A solution is likely possible that complies with the SOLAS requirements, but not as simple as removing pairs of inboard cabins. See figure below.



○ **Figure 1** Sketch of alternate arrangement to cabins on the Matanuska Cabin Deck. Developed from vessel General Arrangement drawing. Blue arrow shows a dead end corridor remaining after the removal of the inboard cabins.

Alternative Arrangement Option

If the State has a strong desire to reduce the Cabin Deck modification scope of work, an alternative exists that could balance cabin capacity and reduced modification scope. See sketch below.

1. Retain inboard cabins, largely unmodified.
2. Combine fore/aft pairs of outboard cabins to make 4-6 person suites.
3. Remove one pair of fore/aft toilet/shower spaces to make a passageway between transverse corridors.
4. This concept has not been strongly vetted, but could have value should AMHS decide to pursue a reduce scope option.

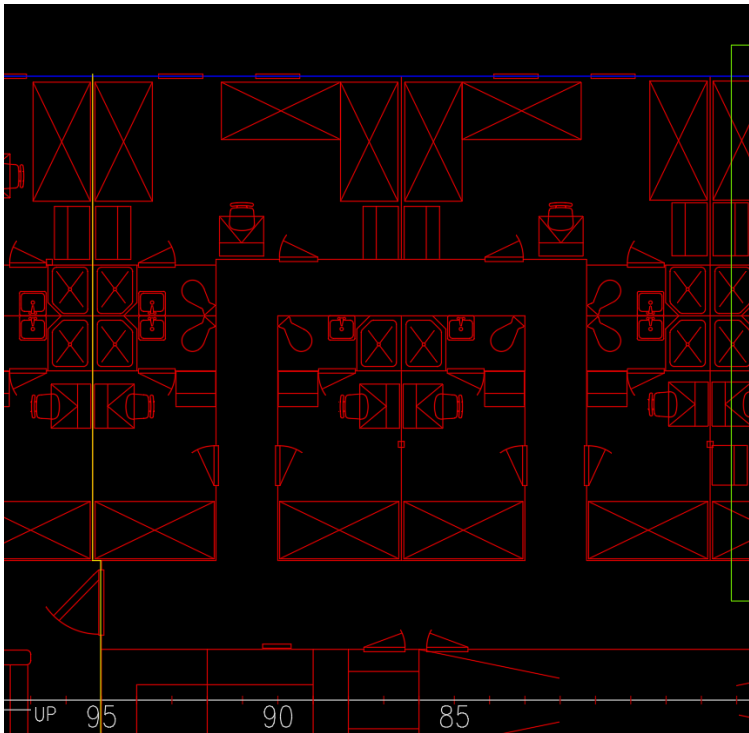


Figure 2 Alternative option for cabin deck layout. Joining pairs of outboard cabins and removing a pair of toilet/shower spaces could allow for new longitudinal passageways that would eliminate the existing dead-end corridors.